

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and the following remarks.

I. Status of the Claims

Claims 2, 5-6 and 21-34 are currently pending in the application, with claims 2, 29 and 32 being the independent claims. Claims 1, 3 and 7-20 were previously canceled. Claim 4 is canceled without prejudice to or disclaimer of the subject matter therein. Claims 2, 5 and 6 are amended. New claims 21-34 are added.

II. The Amendments to the Claims

Claim 2 is amended to delete the phrase “wherein said nucleic acid molecule confers vascular-preferred polynucleotide transcription”.

Claim 5 is amended to specify that SEQ ID NO: 47 is a xylem-specific promoter. Support for the amendment to claim 5 is found in claims 2 and 5, as previously presented.

Claim 6 is amended to recite that SEQ ID NO: 47 is operably linked to a gene encoding an RNA interference molecule. Support for the amendment to claim 6 is found in Example 8 at page 21 of the published patent application.

New claim 21 specifies that the RNA interference molecule is a portion of the coding region of cinnamyl alcohol dehydrogenase (CAD). Support for new claim 21 is found in Example 8 at page 21 of the published patent application.

New claims 22 is directed to a vector comprising the isolated nucleic molecule of claim 2, and new claim 23 specifies that the RNA interference molecule is a portion of the coding region

of cinnamyl alcohol dehydrogenase (CAD). Support for new claims 22-23 is found throughout the specification and in particular at pages 9-10 of the published patent application.

New claims 24-34 correspond to claims 7-20 as originally filed. Claims 24-25 recite a plant cell transformed with the vector of the invention. New claims 26-28 are drawn to a transgenic plant comprising a transformed plant cell and expressing the RNA interference molecule according to the invention. New claims 29-34 are directed to methods of making wood or wood pulp comprising the steps of a) transforming a plant cell with a vector comprising the sequence of SEQ ID NO: 47 operably linked to a gene encoding an RNA interference molecule to obtain a transformed plant cell; b) culturing the transformed plant cell under conditions that promote growth of a plant to produce a transgenic plant that expresses the RNA interference molecule; and c) obtaining wood or wood pulp from the transgenic plant. Support for new claims 24-34 may be found at pages 9-11 of the published patent application and in claims 7-20 as originally filed.

These amendments do not introduce any new matter into the application. The claims are amended to address the Examiner's concern with regard to claim patentability and place the claims in condition for allowance or, at least, in better form for appeal. Entry of these amendments after final is therefore respectfully requested.

III. The Telephone Interview with the Examiner

Applicants wish to thank Examiner Cynthia Collins for the courtesy extended to Applicants' representative during the telephone interview held on December 11, 2007. The claims presented herein and the following remarks reflect the issues discussed and agreed upon during the telephone interview.

IV. The Rejection Under 35 U.S.C. § 112, First Paragraph

The Office Action, at pages 3-4, rejects claims 4 and 6 under 35 U.S.C. §112, first paragraph, because the specification allegedly does not provide enablement for isolated nucleic

acid molecules other than the isolated nucleic acid molecule comprising SEQ ID NO: 47. Further, the Office Action alleges that the specification does not disclose that SEQ ID NO: 47 is capable of downregulating the expression of an operably linked gene. Applicants respectfully traverse this ground of rejection.

Without acquiescing to the propriety of the rejection, the foregoing cancels claim 4 and amends claim 6 to recite that SEQ ID NO: 47 is operably linked to a gene encoding an RNA interference molecule. In addition, new claim 21 specifies that the RNA interference molecule is a portion of the coding region of cinnamyl alcohol dehydrogenase (CAD). Further, new claims 22-23 are drawn to a vector comprising the isolated nucleic acid molecule of the invention and new claims 24-28 are directed to plant cells transformed with the vector and transgenic plants comprising the transformed plant cells and expressing an RNA interference molecule which is a portion of the coding region of cinnamyl alcohol dehydrogenase (CAD). Finally, new claims 29-34 are directed to methods of making wood or wood pulp from the transgenic plants. Example 8 in the specification shows that plant cells transformed with a vector comprising the xylem-specific promoter of the invention operably linked to a gene encoding an RNA interference molecule corresponding to a portion of CAD may be used to produce transgenic plants that express a decrease in enzyme activity and are characterized by a change in content and composition of lignin. Thus, the claimed invention is fully enabled.

Reconsideration and withdrawal of this ground of rejection are therefore respectfully requested.

V. The Double Patenting Rejection

The Office Action, at page 4, alleges that claim 5 is a substantial duplicate of claim 2. Applicants respectfully traverse this rejection.

Solely to advance the application to allowance, and not in acquiescence with the rejection, claim 2 is amended to delete the recitation of an inherent limitation and claim 5 is

amended to specify that SEQ ID NO: 47 is a xylem-specific promoter. Thus, the rejection is moot.

Reconsideration and withdrawal of this ground of rejection are therefore respectfully requested.

VI. Allowable Subject Matter

The Office Action, at page 4, states that claim 2 is allowable. Claims 5-6 and 21-22 recite properties and functional limitations of SEQ ID NO: 47, and thus are allowable. Claims 23-34 are drawn to vectors comprising the allowable sequence, plant cells transformed with these vectors, transgenic plants obtained from the transformed plant cells, and methods of obtaining wood or wood pulp from the transgenic plants. Therefore, Applicants respectfully submit that claims 23-34 are also allowable. A notice to this effect is earnestly solicited.

CONCLUSION

All of the stated grounds of rejection have been properly traversed or rendered moot. Thus, the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. § 1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date

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